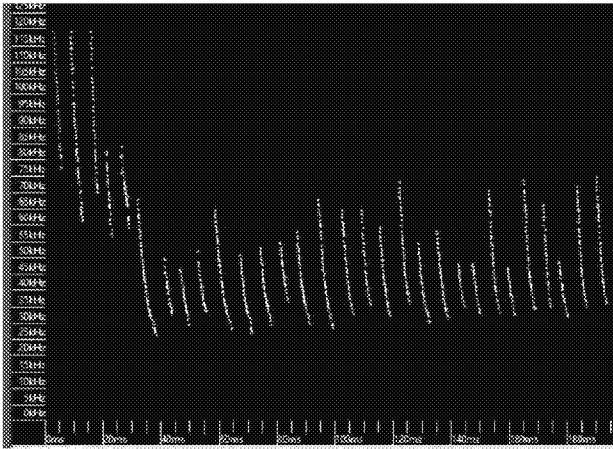


# Free The Falls Gorge Dam Removal Project Summit County, Ohio

## THREATENED AND ENDANGERED BAT SPECIES PRESENCE/PROBABLE ABSENCE ACOUSTIC SURVEY

August 2020



TAILS# 03EI5000-2020-TA-1166

USFWS Reference #20-24

### Prepared by:

Jason Whittle  
Summit Metro Parks  
975 Treaty Line Road  
Akron, OH 44313



Describing the methods and findings of an acoustic survey for listed bat species on a project with an approximately 50-acre habitat impact area in Cuyahoga Falls, Summit County, OH taking place in July 2020.

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# I INTRODUCTION

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The following report presents the findings of the presence/probable absence survey of listed bat species for the future Free The Falls Gorge Dam Removal Project (Project) (approximately 41.12302, -81.49738). Target bat species included federally listed Indiana (*Myotis sodalis*) and northern long-eared (*Myotis septentrionalis*) bats; state endangered little brown (*Myotis lucigufus*) and tri-colored bats (*Perimyotis subflavus*).

Technical assistance (TAILS# 03EI5000-2020-TA-1166) was received from U.S. Fish and Wildlife Service (USFWS) with a recommendation to conduct a presence/probable absence survey. In anticipation of this technical assistance response, a detailed bat survey study plan was submitted to the USFWS – Ohio Field Office and the Ohio Department of Natural Resources (ODNR) on June 30, 2020. Concurrence was received from USFWS on June 30, 2020 (reference #20-024) and ODNR on July 9, 2020. Please see [Appendix A](#) for agency correspondence. The Project proponent (Summit Metro Parks) elected to conduct acoustic presence/probable absence surveys, pursuant to written USFWS recommendations previously mentioned. Physical capture of bats (mist net surveys) were not permitted by ODNR for the summer season 2020.

The proposed Project may impact approximately 45-50 acres of forested habitat that is potentially suitable for use by roosting, foraging, and/or commuting listed bat species. Project Mapping is provided in [Appendix B](#).

## 2 METHODS

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There were no deviations from the approved study plan. Four Wildlife Acoustics Song Meter Mini Bat Ultrasonic Recorders (detectors) were deployed at appropriate locations within or immediately adjacent to the proposed impact area on the nights of July 13, 14, 17, and 18, 2020. Detectors were mounted to the top of ~12' steel conduit poles for clearance. Detectors were brand new and unused, but functionality was still determined through finger rubs. Detectors were set to record from 30 minutes before sunset to 30 minutes after sunrise. Twelve detector nights were recorded in total. Weather was confirmed using the closest Weather Underground Station (Gorge Park - KOHCUYAH20), which is within the Project area. No precipitation was recorded during the survey period and low temperatures were 65-71 degrees F.

Recordings were processed through Kaleidoscope Pro (v5.1; bats of North America, OH species, "0" Sensitivity level) for auto identification. Manual vetting was conducted by Jason Whittle.

## 3 RESULTS

### 3.1 FIELD SURVEY

#### 3.1.1 Detector Location

Twelve detector nights were sampled from July 13 through July 18, 2020. Photos of detector sets and context are provided in [Appendix C](#). Detectors were placed in likely locations within and immediately adjacent to the Project area to maximize species detection. A number of habitat subtypes were sampled including, open wetlands, upland and riparian forest, wooded corridors, and open trails. Detailed summary information about the acoustic sites sampled during the course of this survey are provided in Table 1.

Table 1: Detector Location Information

Detector Location	Number of Detector Nights	Habitat	Latitude	Longitude	7/13	7/14	7/17	7/18
FTF-01	2	Upland Forest	41.11422	-81.5219	X <sup>1</sup>	X		
FTF-02	2	Upland Forest	41.11505	-81.5223	X	X		
FTF-03	2	Trail	41.11672	-81.5209	X	X		
FTF-04	2	Bottomland Forest	41.11935	-81.5195	X	X		
FTF-05	1	Upland Forest	41.11942	-81.5156			X	
FTF-06	1	Riparian Corridor	41.12283	-81.5149				X
FTF-07	1	Trail	41.12264	-81.4982				X
FTF-08	1	Reservoir	41.11802	-81.4921			X	

#### 3.1.2 Species Results

Manual vetting was conducted by Jason Whittle and confirmed the presence of federally threatened *Myotis septentrionalis* (northern long-eared bat) as well as the state endangered *Perimyotis subflavus* (tri-colored bat). Manual vetting negated automated call ID of *Myotis lucifugus* (little brown bat). No *Myotis sodalis* (Indiana bat) calls were reported by automated ID or identified through subsequent manual vetting. *Eptesicus fuscus*, *Lasiurus borealis*, *Lasionycteris noctivagans*, and *Lasiurus cinereus* were all determined to be present as well. Please see Table 2 for a breakdown of calls (by location and night) and assumed presence post manual vetting. Table 3 lists the maximum likelihood values assigned by Kaleidoscope Pro prior to manual vetting.

Table 2: Calls by Site, Night, and Species; Post Manual Vetting

Detector Location	Survey Night	EPTFUS	LASBOR	LASCIN	LASNOC	MYOLUC	MYOSEP	NYCHUM	PERSUB
FTF-01	7/13	47 <sup>2</sup>	15	48	37			2	

<sup>1</sup> "X" denotes this detector location was surveyed on this date

<sup>2</sup> A non-null value in this table denotes assumed presence after automated ID and manual vetting

Detector Location	Survey Night	EPTFUS	LASBOR	LASCIN	LASNOC	MYOLUC	MYOSEP	NYCHUM	PERSUB
	7/14	133	8	97	26			8	
FTF-02	7/13	59	15	86	11			7	
	7/14	106	10	105	22			7	
FTF-03	7/13	170	19	93	22			8	1
	7/14	317	27	163	17			4	
FTF-04	7/13	156		23	11		21		
	7/14	211	3	79	15		16		
FTF-05	7/17	558	2	50	12				
FTF-06	7/17	265	2	65	43		2	1	3
FTF-07	7/18	844	12	204	175			1	1
FTF-08	7/17	232	21	284	80			6	2

Table 3: KPro MLE Values by Site and Night

Detector Location	Survey Night	EPTFUS	LASBOR	LASCIN	LASNOC	MYOLUC	MYOSEP	NYCHUM	PERSUB
FTF-01	7/13	0	0	0	0.0002333	1	1	1	1
	7/14	0	0.0000126	0	1	0.9994883	1	0.015752	1
FTF-02	7/13	0	0	0	1	1	1	0.3053713	1
	7/14	0	0	0	1	1	1	0.0869258	1
FTF-03	7/13	0	0	0	1	1	1	0.3438976	0.9282602
	7/14	0	0	0	1	1	1	1	1
FTF-04	7/13	0	1	0.0000141	1	0.584002	0	1	1
	7/14	0	0.0002537	0	1	1	0	1	1
FTF-05	7/17	0	0.002634	0.000127	1	1	1	1	0.220689
FTF-06	7/17	0	0.235134	0	1	0.5965529	0.0008177	0.6407392	0.0004468
FTF-07	7/18	0	0	0	0.0318972	1	1	1	0.0144974
FTF-08	7/17	0	0	0	1	1	1	0.8192466	0.1087473

## 4 SUMMARY

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The Free the Falls Gorge Dam Removal Project was surveyed through the use of acoustic detection on July 13 and 14 and July 17 and 18, 2020. Eight individual locations representing 12 detector nights were surveyed to sample the entire area. Seven species of bat (Table 1) were detected through automated ID and subsequent manual vetting and are assumed present within the Project area, including *Myotis septentrionalis*. No *Myotis sodalis* were detected during the course of this survey, nor during any of the previous surveys which took place within the Gorge and Cascade Valley Metro Parks by Summit Metro Parks staff. Please do not hesitate to contact me at [jwhittle@summitmetroparks.org](mailto:jwhittle@summitmetroparks.org) or 330.472.8210 if you have any questions or require additional information.

Sincerely,



**Jason Whittle**  
**Ecologist**  
**Summit Metro Parks**  
**975 Treaty Line Road**  
**Akron, OH 44313**

**Cc:** Ms. Angela Boyer – U.S. Fish and Wildlife Service  
Ms. Sarah Stankovich – Ohio Department of Natural Resources

# **Appendix A**

## **Agency Correspondence**



## Jason Whittle

---

**From:** Boyer, Angela <angela\_boyer@fws.gov>  
**Sent:** Tuesday, June 30, 2020 13:19  
**To:** Jason Whittle; Sarah.Stankavich@dnr.state.oh.us  
**Cc:** Mike Johnson; Marlo Perdicas  
**Subject:** Re: [EXTERNAL] Gorge Dam Removal Acoustic Study Plan (TAILS# 03E15000-2020-TA-1166)

Jason,

This response provides U.S. Fish and Wildlife Service approval of your proposed acoustic survey for the Free the Falls Project in Summit County, Ohio. Please note that plans must also be reviewed and approved by the Ohio Division of Wildlife before any surveys take place. This survey has been assigned the reference number **20-024**. Please include this project reference number in all correspondence to the U.S. Fish and Wildlife Service and the Ohio Division of Wildlife. This survey will serve as a summer presence/absence survey for the Indiana bat and northern long-eared bat.

By January 31, 2021, we request that you submit an annual report of your Ohio acoustic survey work to this office using the Midwestern U.S. Spreadsheet in electronic format. Be sure to include data for the site even if no bats were detected. The 2020 Midwestern U.S. Spreadsheet and instructions are found here:  
<http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>.

Please notify me if any surveys are cancelled or otherwise not completed this field season. Please contact me if you have questions.

Sincerely,  
Angela Boyer  
Endangered Species Coordinator for Ohio  
U.S. Fish and Wildlife Service  
4625 Morse Road, Suite 104  
Columbus, Ohio 43230  
(614) 416-8993, ext. 122  
(614) 416-8994 FAX

---

**From:** Jason Whittle <JWhittle@summitmetroparks.org>  
**Sent:** Tuesday, June 30, 2020 10:37 AM  
**To:** Boyer, Angela <angela\_boyer@fws.gov>; Sarah.Stankavich@dnr.state.oh.us <Sarah.Stankavich@dnr.state.oh.us>  
**Cc:** Mike Johnson <mjohnson@summitmetroparks.org>; Marlo Perdicas <MPerdicas@summitmetroparks.org>  
**Subject:** Re: [EXTERNAL] Gorge Dam Removal Acoustic Study Plan (TAILS# 03E15000-2020-TA-1166)

Version 5.1.0, as it is approved software.

Jason Whittle  
Biologist  
Summit Metro Parks  
975 Treaty Line Rd.  
Akron, Ohio 44313  
D: 330.865.8057 x 228  
C: 330.472.8210  
summitmetroparks.org  
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**From:** Boyer, Angela <angela\_boyer@fws.gov>  
**Sent:** Tuesday, June 30, 2020 10:12:07 AM  
**To:** Jason Whittle <JWhittle@summitmetroparks.org>; Sarah.Stankavich@dnr.state.oh.us <Sarah.Stankavich@dnr.state.oh.us>  
**Cc:** Mike Johnson <mjohnson@summitmetroparks.org>; Marlo Perdicas <MPerdicas@summitmetroparks.org>  
**Subject:** Re: [EXTERNAL] Gorge Dam Removal Acoustic Study Plan (TAILS# 03E15000-2020-TA-1166)

Jason,

You need to specify the acoustic software program(s) you will be using for the acoustic analysis.

Angie

---

**From:** Jason Whittle <JWhittle@summitmetroparks.org>  
**Sent:** Tuesday, June 30, 2020 9:20 AM  
**To:** Boyer, Angela <angela\_boyer@fws.gov>; Sarah.Stankavich@dnr.state.oh.us <Sarah.Stankavich@dnr.state.oh.us>  
**Cc:** Mike Johnson <mjohnson@summitmetroparks.org>; Marlo Perdicas <MPerdicas@summitmetroparks.org>  
**Subject:** [EXTERNAL] Gorge Dam Removal Acoustic Study Plan (TAILS# 03E15000-2020-TA-1166)

Angie and Sarah,

Pursuant to a coordination between Summit Metro Parks and USFWS (TAILS# 03E15000-2020-TA-1166), we are submitting this study plan to conduct acoustic presence/probable absence surveys in Cascade Valley and Gorge Metro Parks. This would be a compliance survey in support of the Gorge Dam Removal Project. It is anticipated that approximately 50 acres of tree removal in several locations (see attached map) will occur as a direct result of this project; one approximately 45 acre sediment de-watering and deposition area and also one approximately 2 kilometer sediment pipeline with a small associated dam removal construction area. Therefore, we propose to survey this project with both linear and non-linear methods; one site consisting of 8 detector nights for the 45 acre deposition area and 2 linear sites consisting of 2 detector nights each (subtotal of 4 detector nights) for the sediment pipeline route for a survey grand total of 12 detector nights. Surveys would adhere to USFWS Indiana Bat Survey Guidance and be conducted prior to August 15, 2020. Detector placement, file processing, and manual vetting would be conducted by Marlo Perdicas (TE206783-4) and myself (TE62286A-3). Please see attached mapping and let us know if you have any questions or require further information to approve this study plan.

Thanks!

Jason Whittle  
Ecologist

Summit Metro Parks  
975 Treaty Line Rd.  
Akron, Ohio 44313  
D: 330.865.8057 x228  
C: 330.472.8210

summitmetroparks.org  
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This message and any response to it may constitute a public record and thus may be publicly available to anyone who requests it.

## **Appendix B**

### **Project Mapping**

# Free The Falls: Gorge Dam Removal

## Bat Habitat Impact Map



### Bat Survey Locations



### Water Resources

#### Waterways

- River
- Headwater
- perennial
- intermittent
- ephemeral
- drainageway
- Culvert
- Stream/River

#### Waterbodies

- DeepWater
- RiverBody
- AquaticBed
- PartialWet
- Wetland
- UNDELINEA\*
- UNDELINEATED

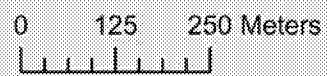
### Parks & Trails

#### Metro Parks

- Metro Park
- Conservation Area
- Trail/Lot

#### Hiking Trails

- Hiking Trails
- Access Drives



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## **Appendix C**


### **Photographic Record**



## Threatened and Endangered Bat Species Acoustic Survey

Free the Falls Gorge Dam Removal Project  
Cuyahoga Falls, Summit County, Ohio

## Photographic Log

<b>Photo No. 1.</b>	
<b>Date:</b> 07/13/2020	
<b>Notes:</b>  Site: FTF-01  Fen opening within an upland forest	


<b>Photo No. 2.</b>	
<b>Date:</b> 07/13/2020	
<b>Notes:</b>  Site: FTF-02  Wetland opening within an upland forest	

## Threatened and Endangered Bat Species Acoustic Survey

Free the Falls Gorge Dam Removal Project  
Cuyahoga Falls, Summit County, Ohio

## Photographic Log

<b>Photo No. 3.</b>	
<b>Date:</b> 07/13/2020	
<b>Notes:</b>  Site: FTF-03  Corridor clearing adjacent to a disused access road	


<b>Photo No. 4.</b>	
<b>Date:</b> 06/12/2020	
<b>Notes:</b>  Site: FTF-04  Junctions of disused access roads within a riparian forest. Mostly closed canopy.	

## Threatened and Endangered Bat Species Acoustic Survey

Free the Falls Gorge Dam Removal Project  
Cuyahoga Falls, Summit County, Ohio

## Photographic Log

<b>Photo No. 5.</b>	
<b>Date:</b> 07/17/2020	
<b>Notes:</b>  Site: FTF-05  Clearing within an upland forest	


<b>Photo No. 6.</b>	
<b>Date:</b> 07/18/2020	
<b>Notes:</b>  Site: FTF-06  Clearing within a upland forest riparian corridor. Cuyahoga River is approximately 50' off camera.	



## Threatened and Endangered Bat Species Acoustic Survey

Free the Falls Gorge Dam Removal Project  
Cuyahoga Falls, Summit County, Ohio

## Photographic Log

<b>Photo No. 7.</b>	
<b>Date:</b> 07/18/2020	
<b>Notes:</b>  Site: FTF-07  Clearing adjacent to a hiking trail, next to the Gorga Dam.	

<b>Photo No. 8.</b>	
<b>Date:</b> 07/17/2020	
<b>Notes:</b>  Site: FTF-08  Adjacent to the Cuyahoga River Gorge Dam pool, approximately 50' off camera.	